



Attorney Docket No. 34848/241851

PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Kozlowski et al.

Confirmation No: 6554

Appl. No.: 10/024,357

Group Art Unit: 1645

Filed: December 18, 2001

For: SYNTHESIS OF HIGH MOLECULAR WEIGHT  
NON-PEPTIDIC POLYMER DERIVATIVES

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March 18, 2002

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Commissioner for Patents  
Washington, DC 20231

**INFORMATION DISCLOSURE STATEMENT  
CITATION UNDER 37 C.F.R. § 1.97**

Sir:

Attached is a list of documents on form PTO-1449 together with a copy of each identified document. It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By submitting the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead submitting the listed documents for the sake of full disclosure.

Respectfully submitted,

Paul F. Pedigo

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Grace R. Rippy

Substitute for form 1449A/PTO  
(Revised 10/2001)

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/024,357
Filing Date	December 18, 2001
First Named Inventor	Kozlowski et al.
Group Art Unit	1645
Examiner Name	
Attorney Docket Number	34848/241851

Sheet 1 of 3

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No.	Document Number Number - Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages of Relevant Figures Appear
	1	US-4,670,417	06/02/1987	Iwasaki et al.	<b>RECEIVED</b> APR 01 2002 TECH CENTER 1600/2900
	2	US-5,252,714	10/12/1993	Harris et al.	
	3	US-5,281,698	01/25/1994	Nitecki	
	4	US-5,468,478	11/21/1995	Saifer et al.	
	5	US-5,650,234	06/22/1997	Dolence et al.	
	6	US-5,672,662	09/30/1997	Harris et al.	
	7	US-5,824,784	10/20/1998	Kinstler et al.	
	8	US-5,900,461	05/04/1999	Harris	
	9	US-5,932,462	08/03/1999	Harris et al.	
	10	US-6,348,558B1	02/19/2002	Harris et al.	
		US-			
		US-			
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		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No.	Foreign Patent Document Country Code - Number Kind Code (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T

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Sheet 2 of 3

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**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	11	Okamoto et al., "Kinetic Study on Reactions Between Polymer Chain-Ends - II. Reactions Between Chlorosulphonyl-Ended and Primary Amino-Ended Polyoxyethylenes Followed by Fluorometry", <u>Eur. Polym. J.</u> , vol. 19, No. 4, pp. 341-346 (1983)	
	12	Greenwald et al., "Highly Water Soluble Taxol Derivatives: 7-Polyethylene Glycol Carbamates and Carbonates," <u>J. Org. Chem.</u> , 60, pp. 331-336 (1995)	
	13	Buckman et al., "Functionalization of Poly(ethylene glycol) and Monomethoxy-Poly(ethylene glycol)," <u>Makromol. Chem.</u> , 182, pp. 1379-1384 (1981)	
	14	Zalipsky et al., "Attachment of Drugs to Polyethylene Glycols," <u>Eur. Polym. J.</u> , Vol. 19, No. 12, pp. 1177-1183 (1983)	
	15	Andresz et al., <u>Makromol. Chem.</u> , 179, pp. 301-312 (1978)	
	16	Olson et al., "Preparation and Characterization of Poly(ethylene glycol)ylated Human Growth Hormone Antagonist," <u>Chemistry &amp; Biological Applications</u> , pp. 170-181 (1997)	
	17	Abuchowski et al., "Cancer Therapy with Chemically Modified Enzymes. I. Antitumor Properties of Polyethylene Glycol-Asparaginase Conjugates," <u>Cancer Biochem. Biophys.</u> , Vol. 7, pp. 175-186 (1984)	
	18	Joppich et al., "Synthesis of Glycyl-L-tryptophylglycine Substituted by Poly(ethylene oxide) at both the Carboxy and the Amino End Groups," <u>Makromol. Chem.</u> , 180, pp. 1381-1384 (1979)	
	19	Pitha et al., "Detergents Linked to Polysaccharides: Preparation and Effects on Membranes and Cells," <u>Eur. J. Biochem.</u> , 94, pp. 11-18 (1979)	
	20	Elling et al., "Immunoaffinity Partitioning: Synthesis and Use of Polyethylene Glycol-Oxirane for Coupling to Bovine Serum Albumin and Monoclonal Antibodies," <u>Biotechnology and Applied Biochemistry</u> , 13, pp. 354-362 (1991)	
	21	Beauchamp et al., "A New Procedure for Synthesis of Polyethylene Glycol-Protein Adducts; Effects on Function, Receptor Recognition, and Clearance of Superoxide Dismutase, Lactoferrin, and $\alpha_2$ -Macroglobulin," <u>Analytical Biochemistry</u> , 131, pp. 25-33 (1983)	
	22	Tondelli et al., "Poly(Ethylene Glycol) Imidazolyl Formates as Oligomeric Drug-Binding Matrices," <u>Journal of Controlled Release</u> , 1, pp. 251-257 (1985)	

Examiner Signature	Date Considered
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	23	Veronese et al., "Activation of Monomethoxy-Polyethylene Glycols by Phenylchloroformates and Modification of Ribonuclease and Superoxide Dismutase," <u>Applied Biochemistry and Biotechnology</u> , Vol. 11, pp. 141-152 (1985)	
	24	Sartore et al., "Enzyme Modification by MPEG with an Amino Acid or Peptide as Spacer Arms," <u>Applied Biochemistry and Biotechnology</u> , Vol. 27, pp. 45-54 (1991)	
	25	Harris et al., "Synthesis and Characterization of Poly(ethylene glycol) Derivatives," <u>J. Polym. Sci. Chem. Ed.</u> , Vol. 22, pp. 341-352 (1984)	
	26	Goodson et al., "Site-Directed PEGylation of Recombinant Interleukin-2 at its Glycosylation Site," <u>BioTechnology</u> , Vol. 8, No. 4, pp. 343-346, (1990)	
	27	Romani et al., "Synthesis of Unsymmetrical Cystine Peptides: Directed Disulfide Pairing with the Sulfenohydrazide Method," <u>Chemistry of Peptides and Proteins</u> , Vol. 2, pp. 29-34 (1984)	
	28	Kogan, "The Synthesis of Substituted Methoxy-Poly(ethylene glycol) Derivatives Suitable for Selective Protein Modification," <u>Synthetic Communications</u> , 22(16), pp. 2417-2424 (1992)	
	29	Woghiren et al., "Protected Thiol-Polyethylene Glycol: A New Activated Polymer for Reversible Protein Modification," <u>Bioconjugate Chem.</u> , 4, pp. 314-318 (1993)	
	30	Sawhney et al., "Bioerodible Hydrogels Based on Photopolymerized Poly(ethylene glycol)-co-poly( $\alpha$ -hydroxy acid) Diacrylate Macromers," <u>Macromolecules</u> , 26, pp. 581-587 (1993)	

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